

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently amended) A method for propagating data over a network, comprising:
  - determining a sequential first set of network addresses;
  - mapping ~~[[the]]~~ a range of addresses in the sequential first set of network addresses to a second set of addresses wherein the second set of addresses is a one to one mapping of the range of address from addresses in the first set and wherein the addresses in the second set are not in increasing address order;
  - traversing the second set of addresses to find another element of the network;
  - transferring the data to the another element of the network ~~and~~ along with an indication of at least a portion of the addresses remaining in the second set by specifying a range of addresses in the second set of addresses.
2. (Original) The method as recited in claim 1 wherein the mapping is a function based on a primitive element.
3. (Original) The method as recited in claim 1 traversing the second set of addresses to find a second element of the computer network and transferring the data to the second element of the computer network and an indication of at least a second portion of the addresses remaining in the second set that have not been traversed.
4. (Original) The method as recited in claim 1 wherein the indication of the at least a portion of the addresses remaining comprises a function used to perform that mapping.
5. (Original) The method as recited in claim 1 wherein the network comprises Internet Protocol addresses.
6. (Original) The method as recited in claim 5 wherein the network is coupled to the Internet.
7. (Original) The method as recited in claim 5 wherein the network comprises a subnet.
8. (Original) The method as recited in claim 1 wherein the element of the computer network comprises a computing device.

9. (Currently amended) A system for propagating data over a network, comprising:

A processor;

A memory device in communication with the processor and storing a sequential first set of network addresses;

A set of computer readable instruction stored on a memory device that is in communication with the processor for carrying out a mapping of ~~[[the]]~~ a range of addresses in the sequential first set of network address to a second set of addresses wherein the second set of addresses is a one to one mapping of the range of addresses in ~~address from~~ the first set and wherein the addresses in the second set are not in increasing address order;

A set of computer readable instructions stored on a memory device in communication with the processor for carrying out a traversing of the second set of addresses to find another element of the network;

A set of computer readable instructions stored on a memory device in communication with the processor for carrying out a retransferring of the data to the another element of the network ~~and~~ along with an indication of at least a portion of the addresses remaining in the second set by specifying a range of addresses in the second set of addresses.

10. (Original) The system as recited in claim 9 wherein the mapping is a function based on a primitive element.

11. (Original) The system as recited in claim 9 comprising a set of computer readable instructions in communication with a memory device for carrying out a traversing of the second set of addresses to find a second element of the computer network and transferring the data to the second element of the computer network and an indication of at least a second portion of the addresses remaining in the second set that have not been traversed.

12. (Original) The system as recited in claim 9 wherein the indication of the at least a portion of the addresses remaining comprises a function used to perform that mapping.

13. (Original) The system as recited in claim 9 wherein the network comprises Internet Protocol addresses.

14. (Original) The system as recited in claim 13 wherein the network is coupled to the Internet.
15. (Original) The system as recited in claim 13 wherein the network comprises a subnet.
16. (Original) The system as recited in claim 9 wherein the element of the computer network comprises a computing device.
17. (Currently amended) A computer readable medium bearing computer readable instructions for propagating data over a network, comprising:
- instructions for determining a sequential first set of network addresses;
  - instructions for mapping ~~[[the]]~~ a range of addresses in the sequential first set of network address to a second set of addresses wherein the second set of addresses is a one to one mapping of the range of addresses in ~~address from~~ the first set and wherein the addresses in the second set are not in increasing address order;
  - instructions for traversing the second set of addresses to find another element of the network;
  - instructions for transferring the data to the another element of the network ~~and~~ along with an indication of at least a portion of the addresses remaining in the second set by specifying a range of addresses in the second set of addresses.
18. (Original) The computer-readable medium as recited in claim 17 wherein the mapping is a function based on a primitive element.
19. (Original) The computer-readable medium as recited in claim 17 comprising instructions for traversing the second set of addresses to find a second element of the computer network and transferring the data to the second element of the computer network and an indication of at least a second portion of the addresses remaining in the second set that have not been traversed.
20. (Original) The computer-readable medium as recited in claim 17 wherein the indication of the at least a portion of the addresses remaining comprises a function used to perform that mapping.

21. (Original) The computer-readable medium as recited in claim 17 wherein the network comprises Internet Protocol addresses.
22. (Original) The computer-readable medium as recited in claim 21 wherein the network is coupled to the Internet.
23. (Original) The computer-readable medium as recited in claim 21 wherein the network comprises a subnet.
24. (Original) The computer-readable medium as recited in claim 17 wherein the element of the computer network comprises a computing device.
25. (Currently amended) A method for distributed computing propagation, comprising:
- (a) determining a sequential first set of network addresses;
  - (b) mapping ~~[[the]]~~ a range of addresses in the sequential first set of network address to a second set of addresses wherein the second set of addresses is a one to one mapping of the range of addresses in ~~address from~~ the first set and wherein the addresses in the second set are not in increasing address order;
  - (c) traversing the second set of addresses to locate at least two other elements of the network;
  - (d) transferring a set of computer readable instructions to the at least two other elements ~~another element~~ of the network to carry out a distributed computing function; and
  - (e) transferring an indication of at least a portion of the addresses remaining in the second set by specifying a range of addresses in the second set of addresses along with a set of computer-readable instructions for carrying out acts (a) through (d) to the at least two other elements.
26. (Original) The method as recited in claim 25 wherein the mapping is a function based on a primitive element.
27. (Original) The method as recited in claim 25 wherein the indication of the at least a portion of the addresses remaining comprises a function used to perform that mapping.

28. (Original) The method as recited in claim 1 wherein the network comprises Internet Protocol addresses.

29. (Original) The method as recited in claim 26 wherein the network is coupled to the Internet.

30. (Original) The method as recited in claim 26 wherein the network comprises a subnet.

31. (Original) The method as recited in claim 25 wherein the element of the computer network comprises a computing device.